

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
10 August 2006 (10.08.2006)

PCT

(10) International Publication Number  
**WO 2006/083698 A3**

(51) International Patent Classification:

A61L 27/34 (2006.01) A61L 27/26 (2006.01)  
A61L 31/10 (2006.01) A61L 27/50 (2006.01)

(21) International Application Number:

PCT/US2006/002853

(22) International Filing Date: 26 January 2006 (26.01.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

11/048,147 1 February 2005 (01.02.2005) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:

10 May 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPLANTABLE OR INSERTABLE MEDICAL DEVICES HAVING OPTIMAL SURFACE ENERGY

(57) Abstract: An implantable or insertable medical device is provided that contains at least one polymeric region which comes into contact with a subject upon implantation or insertion of the device into the subject. The polymeric region(s) contain at least one bulk polymer moiety and at least one surface-active polymer moiety that (a) is covalently attached to the bulk polymer moiety/moieties or admixed with the bulk polymer moiety/moieties and (b) is provided in an amount that is effective in providing the polymeric region(s) with a critical surface energy that is between 20 dynes/cm and 30 dynes/cm upon implantation or insertion of the device into the subject.



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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/002853

## A. CLASSIFICATION OF SUBJECT MATTER

INV. A61L27/34 A61L31/10 A61L27/26 A61L27/50

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, EMBASE, BIOSIS, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 299 604 B1 (RAGHEB ANTHONY O [US] ET AL) 9 October 2001 (2001-10-09) columns 7,8 columns 11,12 column 17, line 60 - column 18, line 10 column 19, lines 44-50 column 20, lines 63-67 claims 1-26	1-27
X	EP 1 192 957 A2 (ETHICON INC [US]) 3 April 2002 (2002-04-03)  paragraphs [0014] - [0022], [0026] examples 1,2 claims 1-21  ----- -/--	1-3, 9-13,15, 19-22, 25-27



Further documents are listed in the continuation of Box C.



See patent family annex.

## \* Special categories of cited documents:

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Date of the actual completion of the international search

23 January 2007

Date of mailing of the international search report

12/02/2007

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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/002853

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 2004/026359 A (ADVANCED CARDIOVASCULAR SYSTEM [US]) 1 April 2004 (2004-04-01)</p> <p>page 4, line 9 - page 7, line 7 examples 1,2 claims 1-37</p>	<p>1,2,9, 11,16, 19,21, 22,24-27</p>
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X	<p>EP 0 923 953 A2 (SCHNEIDER USA INC [US]) 23 June 1999 (1999-06-23)</p> <p>paragraphs [0023], [0030] - [0036] paragraphs [0044] - [0048]</p>	<p>1-3,11, 12,14, 15,22, 25-27</p>
A	<p>WO 01/47572 A (ADVANCED CARDIOVASCULAR SYSTEM [US]) 5 July 2001 (2001-07-05) the whole document</p>	<p>1-27</p>
A	<p>US 2004/086542 A1 (HOSSAINY SYED F A [US] ET AL) 6 May 2004 (2004-05-06) the whole document</p>	<p>1-27</p>
A	<p>BAIER R E ET AL: "SURFACE PROPERTIES DETERMINE BIOADHESIVE OUTCOMES: METHODS AND RESULTS" JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, WILEY, NEW YORK, NY, US, vol. 18, no. 4, April 1984 (1984-04), pages 337-355, XP009056388 ISSN: 0021-9304 cited in the application the whole document</p>	<p>1-27</p>
A	<p>DARDIK H ET AL: "MORPHOLOGIC AND BIOPHYSICAL ASSESSMENT OF LONG-TERM HUMAN UMBILICAL CORD VEIN IMPLANTS USED AS VASCULAR CONDUITS" SURGERY, GYNECOLOGY AND OBSTETRICS, XX, XX, vol. 154, no. 1, 1982, pages 17-26, XP009056387 ISSN: 0039-6087 the whole document</p>	<p>1-27</p>

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International application No

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E	WO 2006/047191 A (BOSTON SCIENT SCIMED INC [US]; HELMUS MICHAEL N [US]) 4 May 2006 (2006-05-04) the whole document	1-27

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Information on patent family members

International application No

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